



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/807,343 | 03/24/2004 | Steven Burnett | 08350.9194-02000 | 3491 |
| 58982 7590 01/28/2008 CATERPILLAR/FINNEGAN, HENDERSON, L.L.P. 901 New York Avenue, NW WASHINGTON, DC 20001-4413 | | | | |
| EXAMINER | | | | |
| FOX, CHARLES A | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 3652 | | | | |
| MAIL DATE | | DELIVERY MODE | | |
| 01/28/2008 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/807,343

Applicant(s)

BURNETT ET AL.

Examiner

Charles A. Fox

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15 and 19-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15 and 19-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 1, 2007 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 29-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 29 has a motor which is said to operate at two distinct speeds due to different inputs at each portion of an ejection stroke. (line 4-9). Later this same motor operates to move the ejector at the same speed during these same two portion of the ejection stroke. It is unclear if the speed of each portion of the ejection stroke is the same or different. In the art rejections below the input to the motor is treated as changing at each portion of the ejector stroke such that the ejector moves at a constant speed during each portion of the stroke. Clarification is required. Claims 30-33 are also indefinite as they depend from an indefinite claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15,19-22 and 25-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Liberman et al. Regarding claims 15 and 29 Liberman et al. US 4,112,823 discloses a control system for a cylinder based ejector system for a vehicle comprising:

a power source;

said power source for moving a cylinder attached to an ejection plate;

wherein said cylinder will move at different speeds at different extension lengths when fluid is provided at a constant pressure;

a speed control operative connected to the cylinder and automatically varying the fluid input to the cylinder such that all stages of the cylinder operate at the same speed;

wherein the speed control automatically changes the fluid input bases upon the position of the cylinder during the extension stroke.

Regarding claim 19 Liberman et al. also disclose a valve in communication with the cylinder for adjusting a flow of fluid to said cylinder.

Regarding claims 20 and 21 Liberman further disclose the device as having sensors that detect the full extension of each stage of the cylinder and a valve for adjusting the fluid flow to the cylinder in response to a signal from the sensor.

Regarding claim 22 Liberman et al. also disclose a sensor in the cylinder for detecting when fluid pressure in the cylinder exceeds a predetermined value.

Regarding claim 25 Liberman et al. also disclose a pump as providing the fluid to said cylinder.

Regarding claims 26-28 Liberman also discloses a valve disposed between the fluid source and the cylinder, wherein the valve has a movable spool for regulating the fluid flow via a variable movable resistive control device.

Regarding claims 30 and 31 Liberman discloses a valve for regulating the fluid flow to the cylinder, wherein said cylinder acts as a motor to move the ejector plate.

Regarding claims 32 and 33 Liberman further disclose the device as having sensors that detect the full extension of each stage of the cylinder and a valve for adjusting the fluid flow to the cylinder in response to a signal from the sensor.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liberman et al. as applied to claim 22 above, and further in view of Henneberry. Liberman teaches the limitations of claim 22 as above, they further teach relieving the pressure from the cylinder if it reaches a predetermined limit, thereby stopping movement of the blade. They do not teach returning the ejector blade to the start

position in response to an overpressure signal. Henneberry US 4,522,551 teaches a hydraulic control for an ejection plate with an overpressure sensor, wherein when said sensor is tripped the ejector plate is moved to its original position. It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the device taught by Liberman et al. with controls as taught by Henneberry in order to protect the hydraulic system from damage by immediately relieving a strain on the system when detected.

Response to Amendment

The amendments to the claims filed on November 1, 2007 have been entered into the record.

Response to Arguments

Applicant's arguments filed November 1, 2007 have been fully considered but they are not persuasive. Regarding to rejection of claims 15 and 29 the examiner has interpreted the claims broadly as suggested by the applicant. Liberman does disclose a speed control for their device that operates in a like manner to that as claimed in claim 15. The claims are properly rejected as they are written, as Liberman teaches the limitations of the claims as they are written. Further new rejections of claims 15 and 29 are set forth to show teachings of the newly added subject matter in claims 15 and 29. Applicant's arguments with respect to claim 29 have been considered but are moot in view of the new ground(s) of rejection. Again the new grounds of rejection are needed because of the amendment to claim 29.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is: Purcell 1950, Gordon 1973, Uehara et al. 1993, Shepard et al. 1997 and Nozari 1999. All dealing with various means to control a hydraulic motor, either mechanically or by a variable frequency drive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 571-272-6923. The examiner can normally be reached on 7:00-4:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saul Rodriguez can be reached on 571-272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles A. Fox/

Primary Examiner, Art Unit 3652